# **Supporting Information for:**

# Nucleation and growth of helical nanofilament (B4) liquid-crystal phase confined in nanobowls

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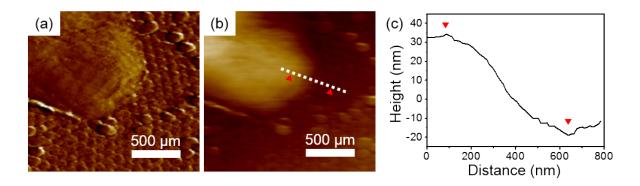
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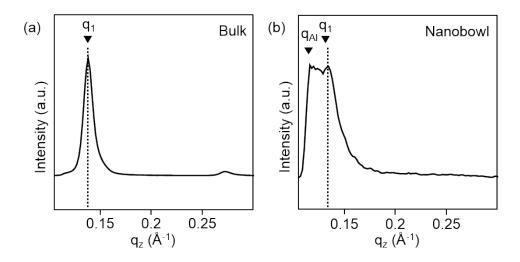
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#### Figure S1



**Fig. S1**. Transition from the confined nanostructures to bulk HNFs. (a) The AFM deflection error, (b) height images and (c) the corresponding height profile.

## Figure S2



**Fig. S2**. The 1D line-cut graphs from the resultant GIXD 2D pattern of (a) the bulk sample and (b) the confined structure in the nanobowls.

## Figure S3

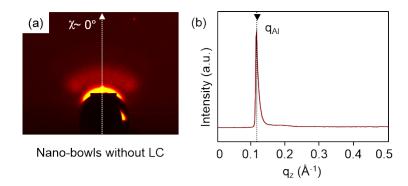


Fig. S3. The resultant GIXD 2D pattern of the nanobowls without sample and corresponding 1D line-cut